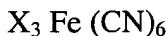


AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.-43. (Canceled).

44. (New) An amperometric sensor suitable for determining the concentration of hydrogen peroxide in a sample, said sensor comprising a ferricyanide compound which, in reduced form, functions as a mediator selective for hydrogen peroxide, wherein the ferricyanide compound is of general formula:



wherein each X is a phosphonium ion of formula $(R^5)(R^6)(R^7)(R^8)P^+$ in which R^5 to R^8 are the same or different alkyl groups containing from 1 to 20 carbon atoms, provided that at least one group R^5 to R^8 contains at least 4 carbon atoms.

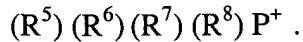
45. (New) A sensor according to claim 44, further comprising an enzyme which is capable of reacting with an analyte in the sample to produce hydrogen peroxide.

46. (New) A sensor according to claim 45, wherein the analyte is glucose and the enzyme is glucose oxidase.

47. (New) A sensor according to claim 44, in which the ferricyanide compound is bound to a polymer.

48. (New) A sensor according to claim 47, wherein the polymer is a polyacrylamide.

49. (New) A sensor according to claim 47, wherein the ferricyanide compound is bound to the polymer via one of groups R^5 to R^8 of a quaternary phosphonium ion of formula



50. (New) A sensor according to claim 44, wherein the ferricyanide has a solubility of from 2000 mg/L to 20,000 mg/L in pure water.

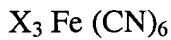
51. (New) An amperometric sensor suitable for determining the concentration of hydrogen peroxide in a sample, said sensor comprising a ferricyanide compound bound to a polymer, which ferricyanide, in reduced form, functions as a mediator selective for hydrogen peroxide.

52. (New) A sensor according to claim 51, wherein the polymer is a polyacrylamide.

53. (New) A sensor according to claim 51, further comprising an enzyme which is capable of reacting with an analyte in the sample to produce hydrogen peroxide.

54. (New) A sensor according to claim 53, wherein the analyte is glucose and the enzyme is glucose oxidase.

55. (New) A sensor according to claim 51, wherein the ferricyanide compound is of general formula:



in which the groups X are the same or different and at least one X is a non-metallic ion.

56. (New) A sensor according to claim 55, in which each X is a quaternary ammonium ion of formula $(R^1)(R^2)(R^3)(R^4)N^+$ in which R^1 to R^4 are the same or different alkyl groups containing from 1 to 20 carbon atoms, provided that at least one of R^1 to R^4 contains at least 4 carbon atoms.

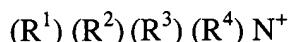
57. (New) A sensor according to claim 56, wherein the ferricyanide compound is tetrahexylammonium ferricyanide, tetrakisdecylammonium ferricyanide, tetradecyltrimethylammonium ferricyanide, hexadecyltrimethylammonium ferricyanide or trimethylhexylammonium ferricyanide.

58. (New) A sensor according to claim 55, wherein each X is a phosphonium ion of formula $(R^5)(R^6)(R^7)(R^8)P^+$ in which R^5 to R^8 are the same or different alkyl groups containing from 1 to 20 carbon atoms, provided that at least one group R^5 to R^8 contains at least 4 carbon atoms.

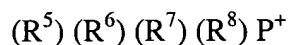
59. (New) A sensor according to claim 55, wherein each X is a nitrogen-containing heterocyclic cation.

60. (New) A sensor according to claim 59, wherein each X is a pyridinium ion.

61. (New) A sensor according to claim 51, wherein the ferricyanide compound is bound to the polymer via one of groups R^1 to R^4 of a quaternary ammonium ion of formula



or via one of groups R^5 to R^8 of a quaternary phosphonium ion of formula



or via a nitrogen-containing heterocyclic cation.

62. (New) A sensor according to claim 50, wherein the ferricyanide compound is polypyridinium ammonium ferricyanide or poly(acrylamide-co-diethyldimethyl ammonium) ferricyanide.

63. (New) A sensor according to claim 51, wherein the ferricyanide has a solubility of from 2000 mg/L to 20,000 mg/L in pure water.

64. (New) A cartridge for an amperometric sensor suitable for measuring hydrogen peroxide in a sample, which cartridge comprises a ferricyanide compound as defined in claim 44.

65. (New) A cartridge according to claim 64, further comprising an enzyme.

66. (New) A cartridge according to claim 64, further comprising an enzyme.

- 67. (New) A cartridge for an amperometric sensor suitable for measuring hydrogen peroxide in a sample, which cartridge comprises a ferricyanide compound as defined in claim 51.
- 68. (New) A cartridge according to claim 67, further comprising an enzyme.
- 69. (New) A cartridge according to claim 67, further comprising an enzyme.